

REMARKS

In a first Office Action dated March 22, 2005, the Examiner rejected claims 1-20 under 35 U.S.C. §102(e) as being anticipated by Liroy (U.S. patent no. 6,775,553). The rejections and objections are traversed and reconsideration is hereby respectfully requested.

The Examiner rejected claims 1-20 under 35 U.S.C. §102(e) as being anticipated by Liroy. With respect to claim 1, the Examiner contended that Liroy teaches a method for an infrastructure element to establish communications between two peers, wherein the at least two peers communicate with each other across an intermediate network including the infrastructure element, the method including monitoring at least a portion of messages exchanged between the two peers for control messages, storing at least some parameters corresponding to the control messages exchanged between the two peers to provide stored parameters, detecting occurrence of retransmission of a control message from one of the two peers, wherein the retransmission of the control message will lead to duplicate negotiations between the two peers, and processing the retransmission of the control message based on the stored parameters such that the duplicate negotiations are avoided (col. 5, line 62 to col. 6, line 30). The applicants respectfully disagree.

Liroy teaches a system of parallel PPP negotiations. A first PPP negotiation occurs between a user's terminal equipment (TE) and a coupled mobile device (MT) on a first side of an air interface. A second PPP negotiation occurs between the MT and an interworking function (IWF) of an infrastructure across the air interface. (See FIG. 3B.) Liroy then teaches a scheme for avoiding a time-out in the first PPP negotiation by a conveyance of a dummy IP address by one of the two peers, that is, the MT, to the other peer, that is, the TE. That is, in response to receiving a Config-Ack from the TE, the MT conveys either an assigned IP address or a dummy IP address back to the TE.

By contrast, claim 1 concerns avoiding time-outs by use of a proxy response. Control messages between two peers are monitored and at least some parameters corresponding to the exchanged control messages are stored. When an occurrence of a retransmission of a control message from one of the two peers is detected, the stored

parameters are used to process the retransmission of the control message. This is different from Lioy, where the assigned IP address provided by the MT to the TE in the first PPP negotiation is not a parameter of a control message exchanged in the first PPP negotiation but rather is obtained by the MT from the IWF via the second PPP negotiation. Furthermore, Lioy does not teach any storage of message parameters as Lioy merely teaches a message conversion, from a Config-Ack conveyed in the second PPP negotiation to a Config-Nak with the same IP address that is conveyed in the first PPP negotiation.

Therefore, Lioy does not teach the features of claim 1 of a method for an infrastructure element to establish communications between two peers in a communication system comprising the at least two peers that communicate with each other across an intermediate network comprising the infrastructure element, the method comprising monitoring at least a portion of messages exchanged between the two peers for control messages, storing at least some parameters corresponding to the control messages exchanged between the two peers to provide stored parameters, and processing a retransmission of a control message from one of the two peers based on the stored parameters such that the duplicate negotiations are avoided. Accordingly, the applicants respectfully request that claim 1 may now be passed to allowance.

Since claims 2-8 depend upon allowable claim 1, the applicants respectfully request that claims 2-8 may now be passed to allowance.

Claim 9 provides a method for an infrastructure element to establish communications between two peers in a communication system comprising the two peers that communicate with each other across an intermediate network comprising the infrastructure element, the method including receiving a request control message targeted to the second peer, storing parameters from the request control message to provide stored request control message parameters, forwarding the request control message to the second peer, receiving a retransmission of the request control message targeted to the second peer, and processing the retransmission of the request control message based on the stored request control message parameters. As noted above, Lioy does not teach these

features. Accordingly, the applicants respectfully request that claim 9 may now be passed to allowance.

Since claims 10-14 depend upon allowable claim 9, the applicants respectfully request that claims 10-14 may now be passed to allowance.

Claim 15 provides an apparatus for use in an intermediate network across which at least two peers communicate with each other, the apparatus comprising a processor that monitors at least a portion of messages exchanged between two peers for control messages, stores, in at least one storage device, at least some parameters corresponding to the control messages exchanged between the two peers to provide stored parameters, detects occurrence of retransmission of a control message from one of the two peers, wherein the retransmission of the control message will lead to duplicate negotiations between the two peers, and processes the retransmission of the control message based on the stored parameters such that the duplicate negotiations are avoided. As described in detail above, no such processor of intermediate network between two peers is taught by Lioy. Accordingly, the applicants respectfully request that claim 15 may now be passed to allowance.

Furthermore, claims 19 and 20 teach a base station controller and a mobile switching center embodying the apparatus of claim 15. The base station (BS) and mobile switching center (MSC) taught by Lioy are mere conduits for control messages and never participate in the negotiations. Therefore, Lioy cannot be construed to teach an embodiment of the apparatus described in claim 15 in a BS or MSC. For this reason, and since claims 16-20 depend upon allowable claim 15, the applicants respectfully request that claims 16-20 may now be passed to allowance.

The applicants note that an IDS filed on October 24, 2003, included a document, PCT/US01/00942, not initialed by the Examiner in the first Office Action.

As the applicants have overcome all substantive rejections and objections given by the Examiner and have complied with all requests properly presented by the Examiner, the applicants contend that this Amendment, with the above discussion, overcomes the

Examiner's objections to and rejections of the pending claims. Therefore, the applicants respectfully solicit allowance of the application. If the Examiner is of the opinion that any issues regarding the status of the claims remain after this response, the Examiner is invited to contact the undersigned representative to expedite resolution of the matter.

Respectfully submitted,
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